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ABSTRACT

The manual offers guidelines for teaching crafts to blind adults with a rehabilitation program oriented toward manual dexterity. The macrame projects described progress from the simple to the more complicated. An introductory section offers helpful hints and instructions for knots and patterns. Projects range from cutting with scissors to covering a lamp shade. Illustrations are provided throughout the manual. (SB)

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Strings 'N' Things

A Teaching Manual for the Blind

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STRINGS 'N THINGS

A Teaching Manual for the Blind

by

Grace Munns

Bogotá, Colombia

Peace Corps
Information Collection and Exchange
Reprint R-24

September 1981

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Also, I wish to thank Joaquín Correa, Director, Gladys Pieschacón, my counterpart, the instructors, staff and all of my blind friends at the Centro de Rehabilitacion para Adultos Ciegos (CRAC).

Grace Munns, PCV
Bogotá, Colombia
November, 1976

Photography by: Richard Cross, PCV

FOREWORD

Crafts is considered by many people to be a useful and appropriate activity within a prevocational training and work evaluation program for the blind. It certainly provides blind people with an excellent means of learning to manipulate small and delicate things and offers to the evaluator a good chance to appreciate the manual dexterity of his client.

This manual is, therefore, an outstanding effort on the part of Mrs. Grace Munns to contribute in a positive and lasting way to the advancement of this kind of training. Mrs. Munns has not only made a good guide to teach macramé to the blind - much desired by instructors of crafts - but has reminded us that even with the most down to earth of all teaching techniques, it is possible to organize the knowledge and put it into meaningful words for the benefit of others. Let us hope that other instructors in underdeveloped countries, as Colombia is, will find inspiration in the example she has set and will follow through. The result would be the enrichment of our knowhow and better training for our clients. It is necessary that our instructors of crafts and all of the other areas of training and adjustment realize that their experiences are valuable to others and that many are eager to read them if someone cares to write them down.

Mrs. Munns came to CHAC in 1974 as a Peace Corps volunteer to teach crafts and techniques of daily living. She has done her job more than well. Because of that she is presenting us with a manual containing her own findings and experiences, that no one would want to pass over. To her and to the Peace Corps we express our deep appreciation.

Joaquín Correa

INTRODUCTION

This manual is intended to help those with little or no craft experience in working with the blind. The projects illustrated here have been used in a rehabilitation program oriented toward manual dexterity for blind adults. But it is possible, with some modifications, that they could be used as successfully with children. The program begins with simple projects and progresses to more complicated ones that demand a higher degree of skill and ability.

The purpose of this program is to teach a person to use their hands. The degree of skill developed will vary from individual to individual since, as is the case with sighted persons, some are more gifted than others. Because of this, the results of their projects will also vary accordingly.

While there are many craft projects suitable and available for a blind person to learn, it was found by trial and error that the following projects, in the order listed, were the most successful.

A lot of trainees have become quite adept at macramé. An important fact to remember is that no two people nor their problems are alike. While these projects are possible for most people, once in a while a person cannot do all, some, or even any of them. In this case, you must try to find another project that they can do because it is vital to their rehabilitation that they succeed at something. At the end of this manual are some suggested projects suitable for such persons.

In introducing the projects, there is no relationship to time except for the first day. This is because it is of no consequence. A trainee is neither encouraged nor discouraged regarding time; he simply takes all the time he needs. The projects are numbered in the order in which they are presented. One trainee may complete number 1, 2 and 3 the first day, then become "bogged down" with number 4 for several days. Another may have difficulty with number 1 or 2 and work on it for a week, but sail through number 4 in one day. There do seem to be average times taken for the projects and these estimates will be given as guidelines only. If a trainee takes more or less time, it is of no importance. The classes are for fifty minutes, one period each day. When a project is advanced far enough, a trainee can work independently outside of class if he cares to. This, again, is neither encouraged nor discouraged. There is no feeling of competition. A trainee is praised and encouraged when he does well, regardless of how much time it took. The average time for the course is six months, but this varies also. After one month the trainee is evaluated by the instructors of all the areas at which time estimates are given as to the amount of time believed to be needed for his rehabilitation. He may excell in some areas, such as braille or typing, and work more slowly in others. A trainee can complete his courses in as little time as four months or it may be necessary for him to take seven or eight months. Of course these

are very short periods and two years or more would be better. But, for many reasons, that is not possible at CRAC. Therefore, it is our goal to give the best possible training in the small amount of time available.

Pressure and tension are to be avoided at all costs. And, remember, even though your trainee cannot see you, any slight displeasure with him will most certainly show in your voice and will be sensed immediately. In this work, <u>patience</u> is <u>more</u> than a virtue...it is a necessity and if you lack it, there's no need to read the rest of this manual. Your time will be better spent looking for another job!

HELPFUL HINTS

It is wise to have your classroom arranged so as to allow for ample movement. Long, narrow tables with trainees sitting on one side only and facing the teacher's desk is a desirable arrangement. It is best to limit the number of trainees to four or five, six at the most. Observe the trainees at all times and if they are obviously having problems, assist them. Otherwise, let them work alone at their own speed. Many times they will not be working correctly but will be unaware of it. In such a case, of course, you assist them.

Have a place for each trainee to keep his own materials, even if that place is only a small box. A set of file drawers is ideal. When he leaves the table to put away his work, he must always push his chair back close to the table so it will not cause another person to stumble. As nearly as is possible, everything in the room should always remain in the same location. In case it is necessary to rearrange it, you should always advise the trainee of the change. Supplies that are used regularly, such as weights and holders, should be kept readily available on each desk.

Fortunately, almost any fibre or grass-like material can be used for macramé. Whatever is plentiful in your area can be made into beautiful designs. It is easier to work with fibrous materials because they are dry, most of the grass-type materials have to be worked while wet.

Working methods can vary also, according to materials on hand. Most books recommend holding the cords with T pins, however, if these are not available, other methods of holding can be used. In our center we took long-necked glass bottles, filled them with cement and put a wire hook in the top. When the cement dried and hardened, we put the bottle in a paper bag and broke the glass. This left cement bottles which we then covered with fabric. They make excellent weighted holders for small projects.

At first, we used bottles filled with sand, but they proved to be dangerous. As we have concrete floors the bottles were constantly being knocked off the tables and broken. If this is not a problem where you are working, they do work well for holding small projects.

Weights for larger projects which are also worked on the tables are bricks covered with fabric.

For larger projects, such as the plant hangers, we use the window-guard bars. However, hooks, curtain rods or anything sufficiently attached to withstand hard pulling can be used. With these large projects, the trainee works while standing.

When the trainees are cutting cords from a ball of string, it is a good idea to keep the string in a container, otherwise it will fall to the floor.

THE KNOTS FOR MACRAME

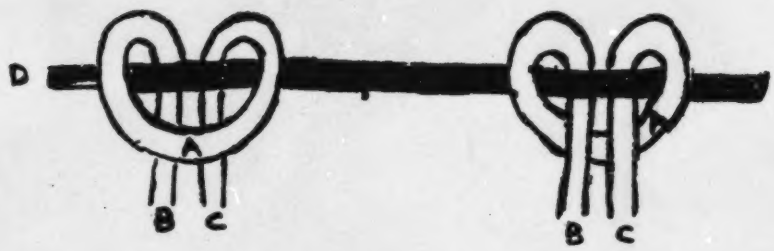
Although many macramé patterns appear to be complicated, most of them actually use but two basic knots: the square knot and the double half hitch. There are other knots to be learned, but for the purpose of this manual, instructions will be given only for the basic knots needed for the projects herein described.

TERMS

Holding cords:	The stationery cords onto which the tying cords are tied.
Tying cords:	The cords used to form the knots.
Mounting cords:	The knots used to secure the tying cords to the holding cord in order to begin a project.
Butterfly:	A method of winding the ends of cords to make them shorter because long cords tend to tangle easily.

KNOTS AND PATTERNS NEEDED FOR THIS MANUAL

Lark's Head Knot (For mounting)

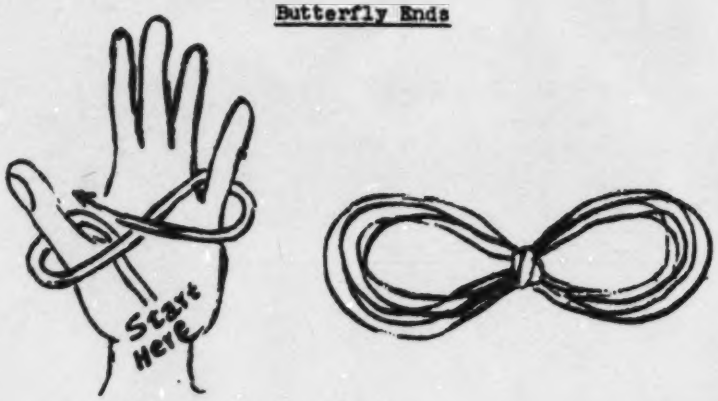


D is the holding cord. Fold ABC in half and place loop first under D, then bring A over D.

Pull the ends (B & C) through A, pull the knot tight.

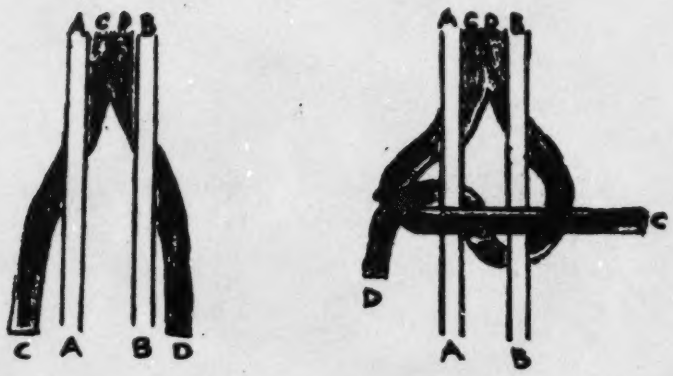
To reverse the lark's head knot, work from over to under, in other words, reversed.

Butterfly Ends



To keep long cords from tangeling, butterfly the ends in the following manner: Begin with the free end and wrap around your thumb and little finger in a Figure 8. Work to within about 15" of the work, slip off hand and secure with a rubber band or string. A gentle pull will release the cord as needed for tying.

Alternating Cords



To utilize cords equally, it is necessary to change tying (A & B) and holding (C & D) cords.

To do this: Place tying cords (A & B) over the holding cords (C & D) and begin tying with C & D. A & B now become the holding cords. This is usually done when the pattern is changed (leaving a small spacing between patterns) or when a bead is added.

Wrapping Cords

Fig. 1

Fig. 2

Fig. 3

Fig. 4

To begin a loop for a plant hanger:

1) Put all cords together to form a loop in the center.
2) With another cord (A) approximately 1 yard long, begin wrapping about 2" left of center, leaving approximately 6". (Figure 1)
3) Continue wrapping closely and tightly until there are about 4" of wrapped cording to form the loop.
4) Now put both groups together, bring the 6" cord (A) up to form a loop and place it on top of all the cords. (Figure 2)
5) Continue wrapping all cords together until the desired length, about 3" or 4", then place the end of the wrapping cord (A) through the loop. (Figure 3)
6) Pull the end of Cord A until the loop and part of the other end of Cord A disappear into the center of the wrapping. Cut off ends of Cord A. This makes a secure binding without a knot.

   This wrapping can be used for securing groups of cords together without first making the loop. Simply begin with Step 4, using a new cord for wrapping. (Figure 4)

   Note: Wrap all cords tightly except about 1/2" from the end loop. If it is too tight at the end, it will be difficult to pull the loop into the center of the wrapping.

Half Knot and Square Knot

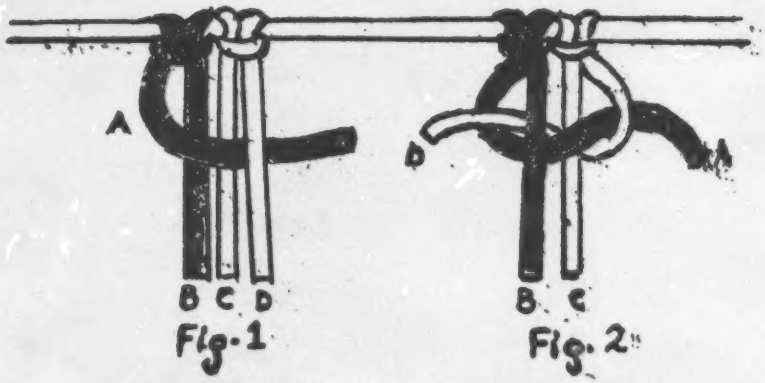


Fig. 1 Fig. 2

Fig. 3 Fig. 4

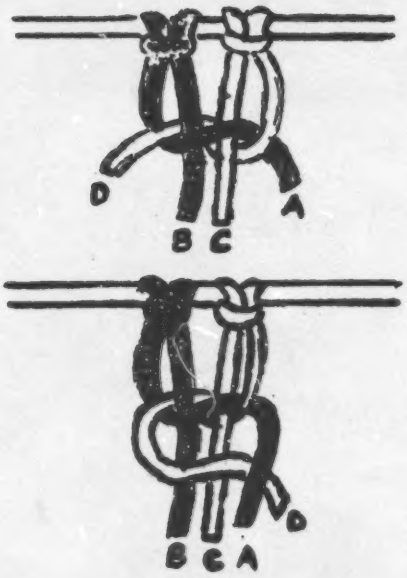
Mount 2 cords at their midpoints with lark's head knots on a holding cord. There are now four cords. The 2 outside cords are the tying cords: the 2 middle cords, the holding cords.

1) Place the left tying cord A over the 2 holding cords B & C.
2) Next, place the right tying cord D over the first tying cord A. (Fig. 1)
3) Then bring tying cord D under holding cords B & C and over cord A, coming up through the loop formed by A & B. (Fig. 2) Pull the knot tight. This is a completed half knot with the "bar" on the right.

To make a full knot (square knot) reverse the procedure, beginning with tying cord A on the right and ending with the bar on the left side. (Fig. 3 and Fig. 4)

When a series of the same knot is tied, i.e. 5" of square knots, it is called a sinnet.

Twist: Half knots on one side

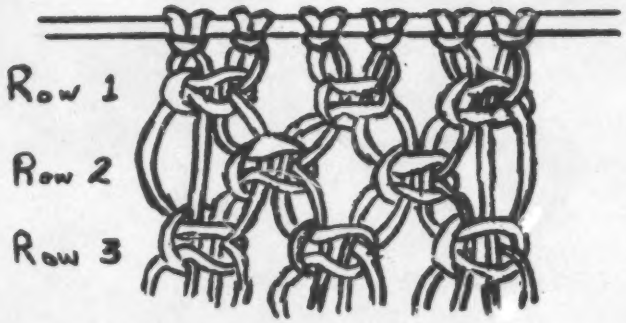


When a half knot is tied on one side only, a natural twist results. For example:

1) Tie a half knot beginning on the right side, with tying cord D.
2) Tie 3 more on the right side only.
3) Now reverse A & D and tie 4 half knots with the tying cord on the right.

Continue in this manner, tying 4 cords on the right, then reversing tying cords, tying 4 more on the right, etc. This forms a natural, attractive twist.
(Note: One can tie more or less than 4 times on the right, or for that matter can tie all on the left side, depending upon the length of the twist desired. Four times is a good average for most materials.)

Alternating Square Knots



This pattern is formed by exchanging tying and holding cords in succeeding rows.

Mount 6 tying cords on holding cord with lark's head knots.

1st row: Tie 3 square knots with 1-2-3-4, 5-6-7-8 and 9-10-11-12.
2nd row: Leave 1 & 2 free; tie 2 square knots with 3-4-5-6 and 7-8-9-10, leave 11 & 12 free.
3rd row: Tie same as row 1: 1-2-3-4, 5-6-7-8 and 9-10-11-12.

Continue in this pattern, odd-numbered rows alike, even rows alike, in other words, alternate tying and holding cords every row. This makes an interesting pattern that can be used in many ways. The knots can be tied tightly together each row, or space can be left between each row, creating a loose, lacy effect.

Half Hitches and Double Half Hitches

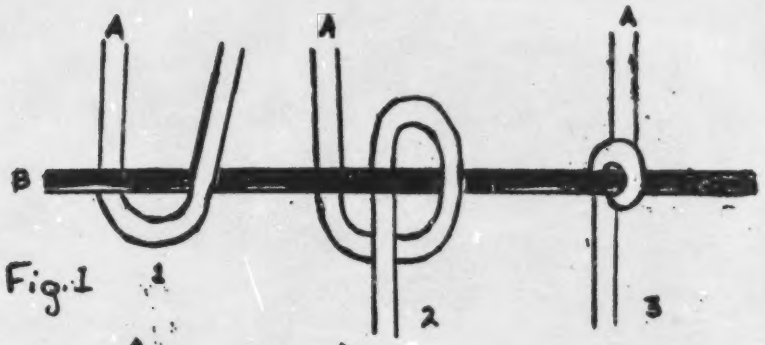


Fig. 1

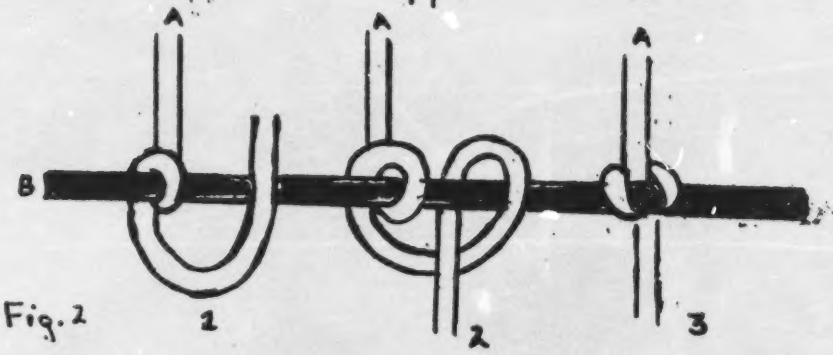


Fig. 2

The Half Hitch is a loose, "looplike" knot, seldom used alone, but more often as the first step in making a double half hitch.

1) A, the tying cord, is always below B, the holding cord. First, bring A over B.
2) Let A form a loop on top of B, then bring A under B and through the loop, going over A.
3) Pull the loop tight. This is not a firm knot at this point. It needs another half hitch in order to secure it. (Fig. 1)

To form the double half hitch (exactly as the half hitch):
First, make the half hitch.

1) Then bring tying cord A over holding cord B again.
2) Let A form another loop on top of B, then again bring A under B and through the loop, going over A.
3) Pull the loop tight to form the completed knot. (Fig. 2)

(Note: This knot can be easily learned if the loops are <u>always</u> kept on TOP. The best way to assure this is to keep the holding cord taut at all times. If the loop tends to go on the bottom, give a firm pull on the holding cord. This will pull the loop on top again. <u>Important</u>: If you are tying to the right, always hold holding cord in right hand and tie with the left hand. If tying to the left, hold it in the left hand and tie with the right.)

Flowers

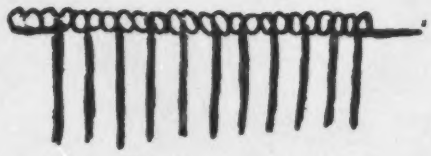


Fig 1

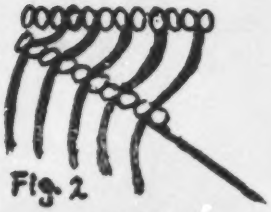


Fig. 2

Fig. 3

Fig. 4

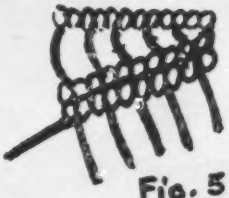


Fig. 5

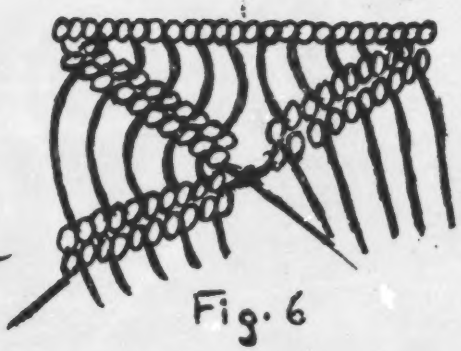


Fig. 6

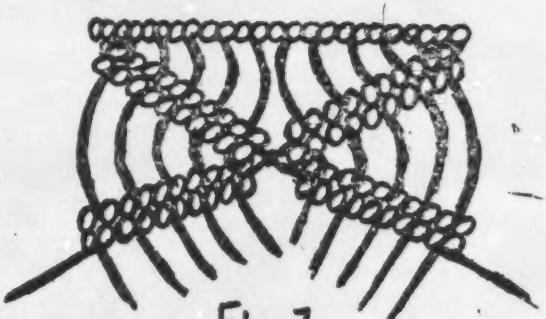


Fig. 7

This pattern is made by tying double half hitches in a diagonal direction.
Example: Mount 6 cords on holding cord with lark's head knots.

1) Tie a row of horizonal double half hitches from left to right. (Fig. 1)
2) Divide the 12 cords into two groups, 6 on the left, 6 on the right.
3) With cord #1 on the left as the holding cord, tie the remaining 5 cords on the left with diagonal double half hitches to the right. (Fig. 2)
4) Tie another row on the left (this time cord #2 is the holding cord). (Fig. 3)
5) Reverse directions and begin with cord #12 on the right as the holding cord and tie diagonal double half hitches to the left. (Fig. 4)
6) Tie the second row on the right the same (cord #11 is now the holding cord). (Fig. 5)
7) Now both left and right tying cords are in the center. Tie both together in a plain, over-hand knot, to join.
8) Now with the left holding cord (still in center) tie diagonal double half hitches to the left. (Fig. 6)
9) Tie the second row to the left.
10) Now, with the right holding cord (in the center), tie diagonal double half hitches to the right.
11) Tie the second row the same, to the right. This completes the flower pattern. (Fig. 7) It can then be "alternated" in a design, if desired.

Alternating Diagonal Double Half Hitches

Fig. 1

Fig. 2

Fig. 3

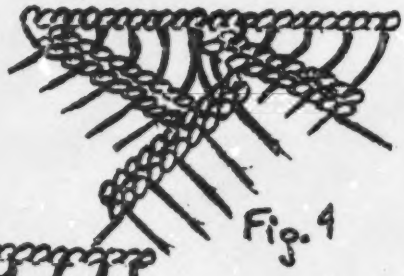


Fig. 4

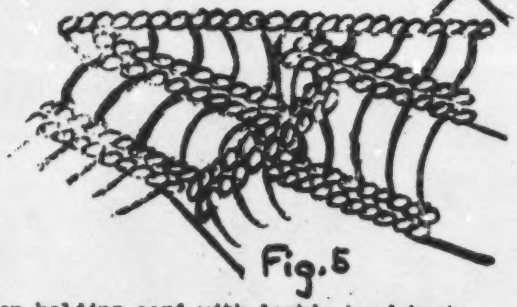


Fig. 5

Mount six cords on holding cord with lark's head knots.

1) Make 1 row double half hitches, beginning at left, tie to right.
2) Divide cords into 2 groups, 6 on the left, 6 on the right.
   For Pattern:
3) Row 1: Beginning on the left side, with cord #1 as the holding cord, tie 5 diagonal double half hitches to the right. (Fig. 1)
4) With cord #2 as the holding cord (#1 is now #6), tie another row of diagonal double half hitches to the right. (Fig. 2)
5) With cord #7 as the holding cord, tie 5 more knots of diagonal double half hitches to the right.
6) With cord #8 as the holding cord (#7 is now #12), tie another row of 5 diagonal double half hitches to right. This completes pattern row 1. (Fig. 3)
7) Pattern Row 2: Beginning on the right side, leave 3 cords (10, 11 & 12), using #9 as the holding cord, tie 5 diagonal double half hitches to the left.
8) Using cord #8 as the holding cord, tie another row of diagonal double half hitches to the left. (Numbers 1, 2 and 3 will be left free.) This completes pattern row 2, the "alternating" row. (Fig. 4)
9) For pattern row 3, follow steps for row one to complete the alternating pattern. (Fig. 5)

Instructions for Button and Cording for Closing

(To be used on purse)

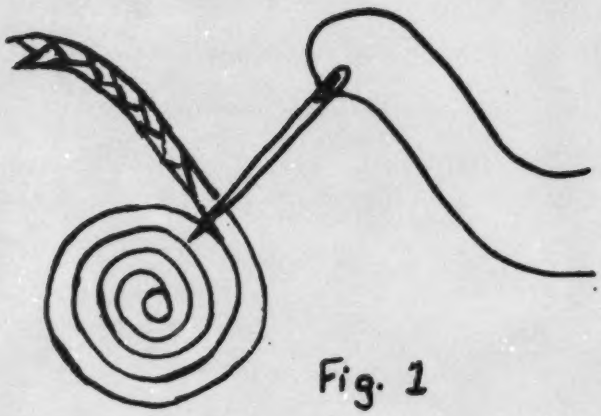


Fig. 1

Material: 3-ply Jute.

Cut a cord of jute, approximately 26" long.

1) Unravel the jute into 3 cords.
2) Fasten the 3 cords together with Scotch tape (or tie), then braid for 20".
3) Fasten end with Scotch tape & cut remaining ends.
4) Remove the Scotch tape from one end and begin rolling the braid tightly, sewing as you roll. (Figure 1)
5) When it is rolled and sewed to the end, cut off the Scotch tape on that end and tuck the loose ends into the braid on the back side. Fasten off thread.

(This makes a button about 1 3/4" in diameter. Use more or less yardage, as desired.)

Cording for Closing Loop

Follow the same instructions for button, without rolling and sewing. When the desired length of braiding is reached for a closing loop, simply pass through the desired place in the purse and sew ends together.

Instructions for Owls (Shown on Cover)

(Figures on following pages) Material: Jute

Cut 12 cords each 2 1/2 yards long. Mount on 24" holding cord with lark's head knots. (There are now 24 cords.)

1) Divide the 24 cords into two groups of 12 each.
2) Beginning with the group on the left, using cord #1 for the holding cord, tie a row of double half hitches to the center.
3) Using cord #2 for holding, tie a 2nd row of double half hitches to the center.
4) With the group of cords on the right, beginning on the right with cord #24 as the holding cord, tie a row of double half hitches to the center.
5) With cord #23 as the holding cord, tie a second row of double half hitches to the center. (Figure 1)
6) For nose: Leave 1/2" space. With the 4 center cords (#11 & 12 and 13 & 14) tie 3 square knots.
7) Now pass cords 12 & 13 through space left between 12 and 13 above the square knots.
8) Pass cord 11 through space left between 11 & 12 on the left and pass cord 14 through space left between 13 & 14 on the right. (Figure 2)
9) Pull all 4 cords tightly (this is called a "popcorn" knot). Then tie one more square knot firmly below the "nose" to hold it in place.
10) Thread the left eye (a bead or a seed) on cord #7 & the right eye on cord #18.

(Continued)

11) Beginning with the left group of cords, from the center, with cord #12 for the holding cord, tie one row of diagonal double half hitches to the left. (Figure 3)
12) With cord #11 for the holding cord, tie another row of diagonal double half hitches to the left.
13) Continue tying double half hitches to the left for 6 rows, tying close in the center and gradually leaving more space at the edge to shape the head. (Figure 4)
14) Repeat the last 3 steps on the right side, reversing all directions, i.e. tie from the center to the right.
15) Put all cords together. With cords #1 & 2 on the left and #23 & 24 on the right, tie a square knot over all the other cords to join.
16) Lay a small branch (for perch) over all the cords and with cords 1 & 2, tie two double half hitches (for claws), using the perch for the holding cord. Leave the other cords below the branch and with cords 23 & 24, tie two more double half hitches for the right claws.
17) Tie all cords together below perch with a wrapping. Cut remaining cords evenly, fringe for tail. (Figure 5)

<u>For Baby Owl</u>

Cut 6 cords approximately 1 1/4 yards long and tie in the same manner as the large owl except instead of tying six diagonal half hitches, tie only three, both right and left sides.

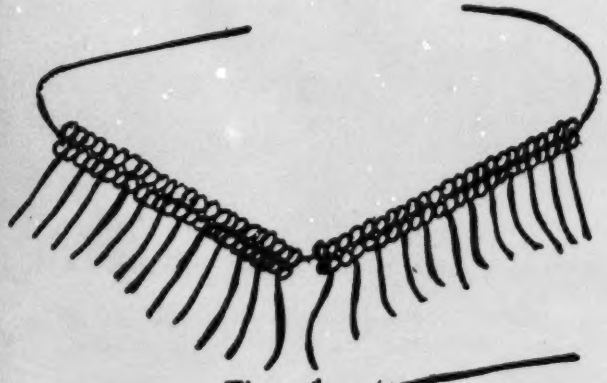


Fig. 1

Fig. 2

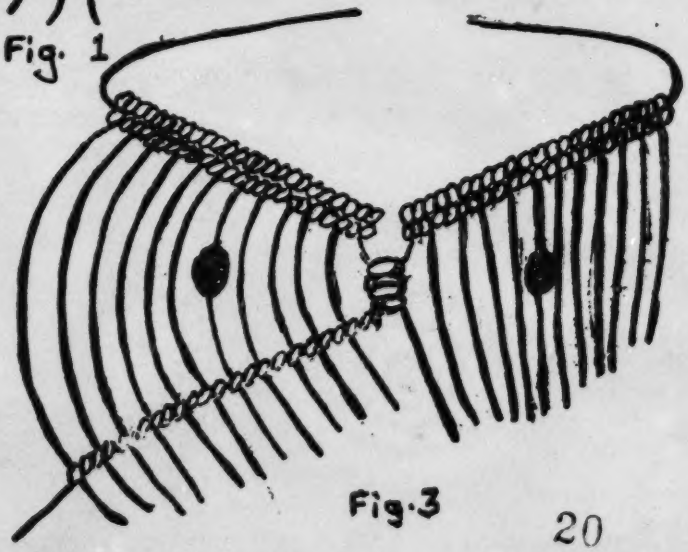


Fig. 3

Continued

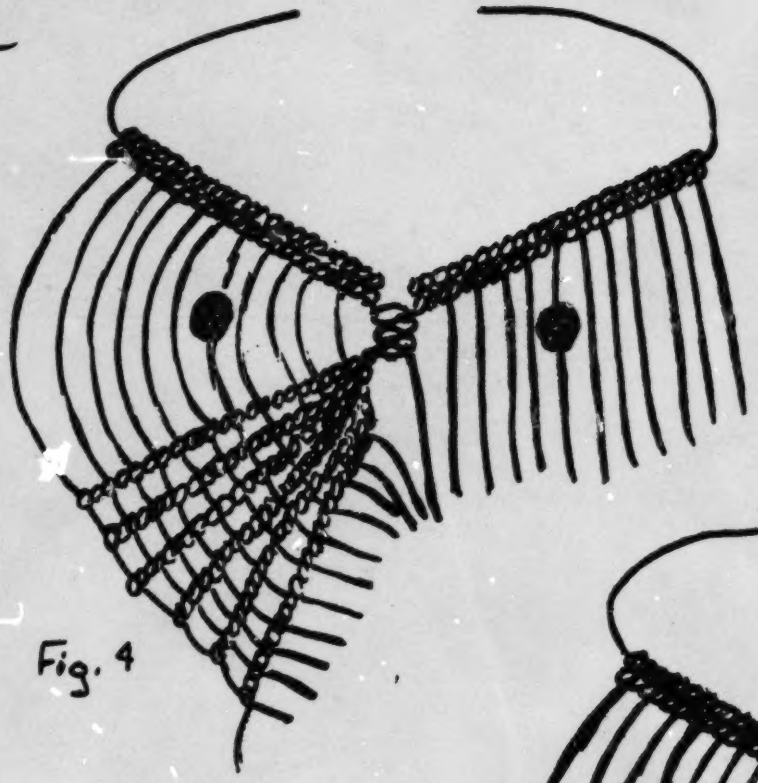


Fig. 4

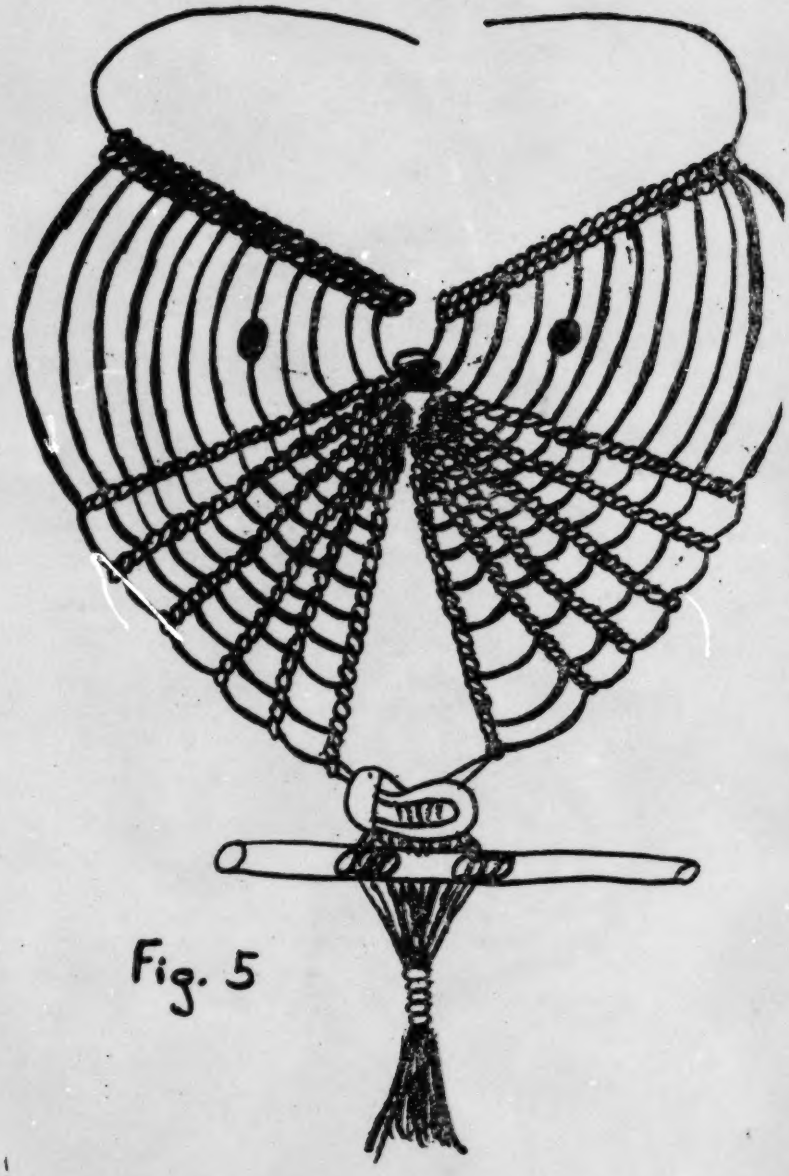


Fig. 5

PROJECTS

1- SENSITIVITY TEST

On the first day in class, the trainee, after a guided tour of the craft room, is given an exercise to test his sensitivity to touch. He is given symbols to identify, such as: a triangle, rectangle, circle, square, spiral, etc. They are of different materials, like metal, wood, plastic and sand paper. Some are hollow, others are solid, i.e. a triangle made of metal tubing, a square made of solid wood, etc. He is to identify the materials as well as the shapes. This is a simple test and most trainees do it well which makes for a good beginning for the teacher-pupil relationship. He has succeeded with the first requirement and is psychologically prepared for the next one.

2- TYING PLAIN KNOTS

The trainee is given a piece of string, approximately 12" long, with instructions to tie 5 or 6 simple, over-hand knots. (Figure 1)* If he cannot do this (you'd be surprised how many have never tried, especially those blind since birth), instruct him in this manner: On the table make a loop with the right end of the string over the left. (Figure 2) Do this several times until he gets the feel. Next, put the right end through the loop, going under the loop, then pull both ends at the same time. (Figure 3) After he does this a few times he usually understands and can hold the string in his hands and tie a knot. However, for some trainees much more time is required.

Next, have him tie knots with an equal space in between them. By holding the string between the thumb and index finger after each knot, he can create an equal distance of approximately 3/4". (Figure 4) It may be necessary to practice on several pieces of string, so keep them short to avoid discouragement (not over 12" long). Make sure he can tie equal distances before going on. (This could take several days if he has never before tied a knot.)

Finally, give him two pieces of string, approximately 12" long, and have him tie equal distance knots with the two strings. (Figure 5) This should be fairly simple if he has mastered the last exercise.

3- CUTTING WITH SCISSORS

With a large, sharp pair of scissors, have the trainee practice cutting pieces of paper. Next, see if he can cut fairly straight strips, squares, etc. Some will have difficulty cutting anything.

Next, have them cut string. They do this by putting the two ends together, forming a loop, putting the scissors in the loop and cutting it in half.

If the trainee does not know how to use the scissors, more time will be needed for practice. It is difficult to explain and so one must simply "get the feel" of it.

*All figure illustrations are on the following page.

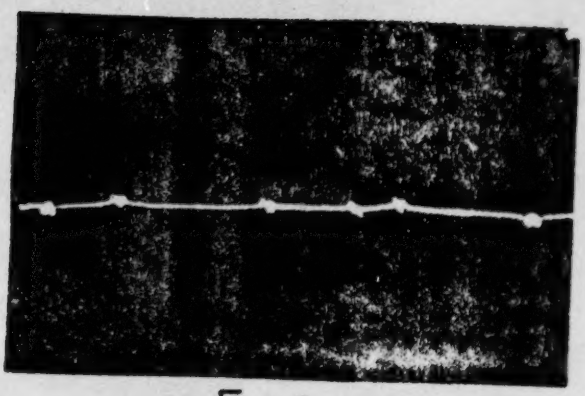


Fig 1

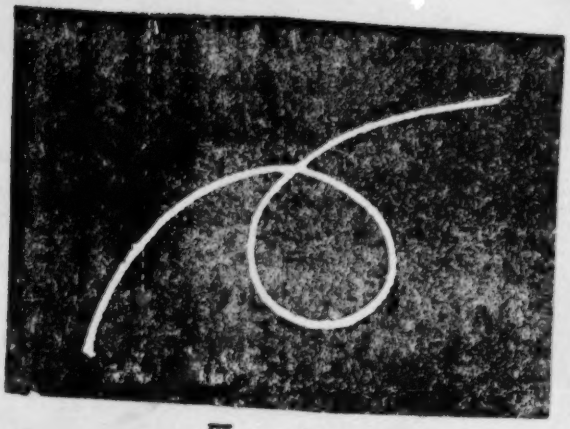


Fig. 2

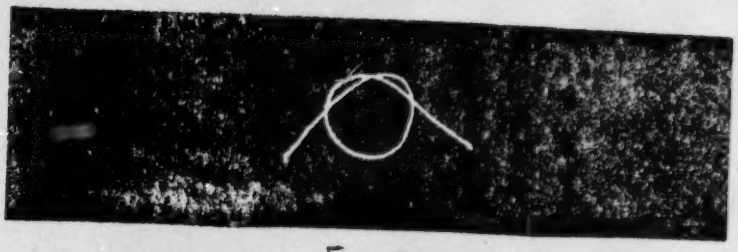


Fig 3

Fig. 4

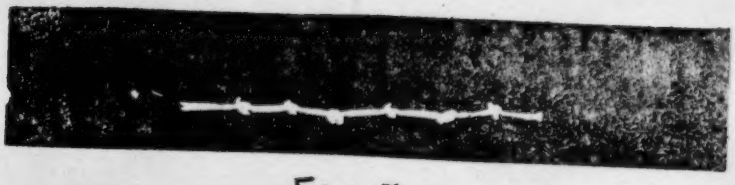


Fig. 5

4- MEASURING

A tape measure for a blind person's use can be made by marking a tape measure with staples on the inches. Designate the feet with a second staple placed in an opposite direction over the first, to form a cross. (+) With such markings, it is easy for him to learn to measure.

First, have the trainee lay the tape flat on the table and ask him to find different measurements, i.e. 4", 10", 3", 21", 36", etc. When this is well understood, have him measure and later, cut materials. Begin with a fairly-wide piece of ribbon or material, say 2" wide and 12" to 14" long. This project is most easily accomplished by the trainee holding the tape measure and the material in his hand, matching the end of the ribbon with the end of the tape and holding both together with the thumb and index finger of the left hand, seek the desired measurement with the thumb and index finger of the right hand. (Figure 6) When he finds the correct measurement, have him fold and cut. (Figure 7)

Next, use a smaller width of ribbon, say 1/2" wide and repeat.

Finally, use string in the same manner.

Average time for these four projects: 1 to 2 weeks.

5- EXERCISE FOR STRING BAG

Have trainee:

a) Measure and cut 12 pieces of string, approximately 20" long.
b) Cut one more piece approximately 10" long, tie ends together.
c) Mount the 12 strings onto the tied string with lark's head knots. (See P. 5)
d) Row 1: Tie strings, two at a time, each with one knot, with equal spacing. (Figure 8)
e) Row 2: Separate the first two strings, leave one apart, separate number three and four string, tie #2 and #3 together. Continue the row in this manner, having one left at the end. (Figure 9)
f) Row 3: Same as Row 1. Continue on in this manner, every row separating the strings and tying alternating knots, like a fish-net. (Figure 10)

Average time for this exercise: 1 week.

Fig. 6

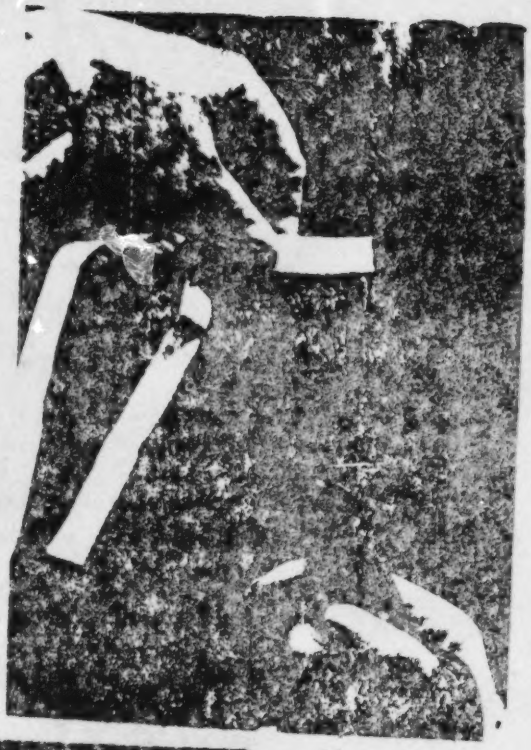


Fig. 7

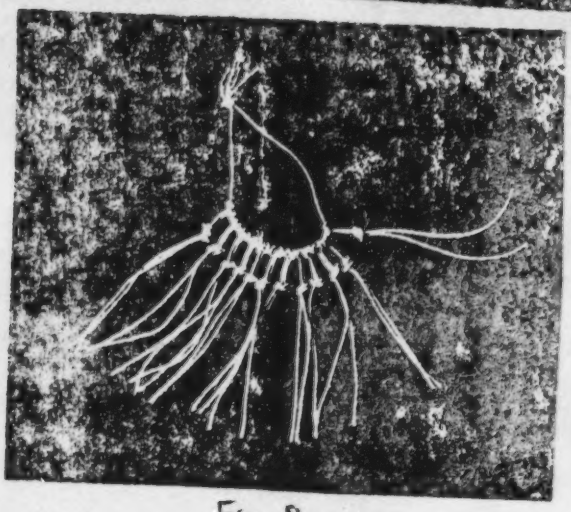


Fig. 8

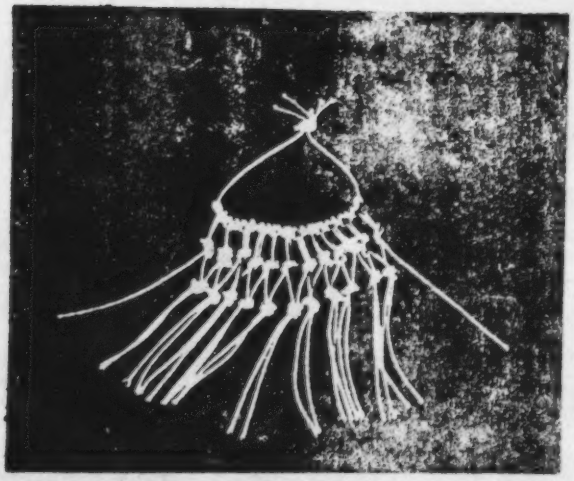


Fig. 9

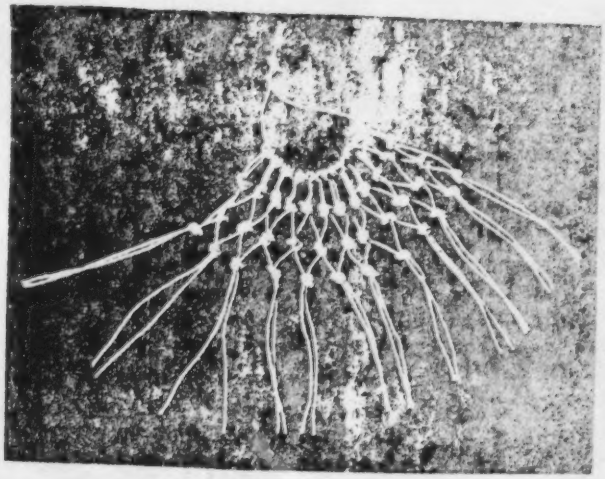


Fig. 10

6- INSTRUCTIONS FOR STRING BAG

a) Measure and cut 48 lengths of string 110" long.

b) Cut another string approximately 44" long, double it (for added strength) and tie ends.

c) Mount the 48 cords on the tied, double string with lark's head knots. (See P. 5)

d) There are now 96 cords. Separate each pair, one on the left side, one on the right side so that there are 48 cords on each side. (Figure 11)

e) The trainee is now ready to start tying the knots (learned in the string bag exercise). To keep the sides from getting mixed, it is wise to tie one side in a large, loose knot and begin tying on the other side. When this side is finished, tie these cords together with the same kind of loose knot, untie and work the other side. (Figure 12) Work in this manner for 21 rows. (Some trainees will naturally make longer spaces between their knots. This is not important as long as they are equal. However, do not allow the spaces to be longer than 1" in any case and 3/4" is better.) From the beginning, the length of the bag at this point should measure between 12 and 13 inches.

f) Divide the cords into two equal groups: 24 (doubles) on the left; 24 (doubles) on the right. Keeping them divided, work 4 more rows, first on one side, then the other. (Figure 13)

g) With the first 4 strings (2 groups of 2), braid for about 3", tie to secure. Continue with the next 4; there will be 12 sets of braids on either side. (Figure 14)

h) For the upper part of the handles: On one side, divide the 12 braids (6 and 6). Put the ends of the cords together in a loop, overlap and tie them together in the center with the middle part of a cord which is approximately 5 yards long (the ends of which have been "butterflied," See P. 6 and Figure 15.) Wrap the newly-formed "handle" according to wrapping instructions. (P. 7 and Figure 16)

Note: If some of the ends are too long, cut off so that none will be longer than the finished, wrapped part of the handle.

i) Repeat for the other handle.

j) EXERCISE FOR HALF KNOTS AND SQUARE KNOTS (In order to finish handle)

1- Cut 2 cords of string, each approximately 24" long.
2- Cut another cord, approximately 8" and tie its ends together.
3- Mount the two 24" cords on the 8" tied cord with lark's head knots.
4- Make half knots and square knots. (See P. 8)

(Continued)

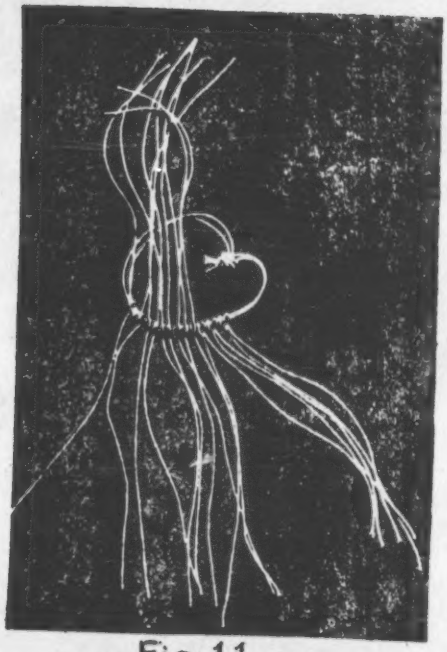


Fig. 11

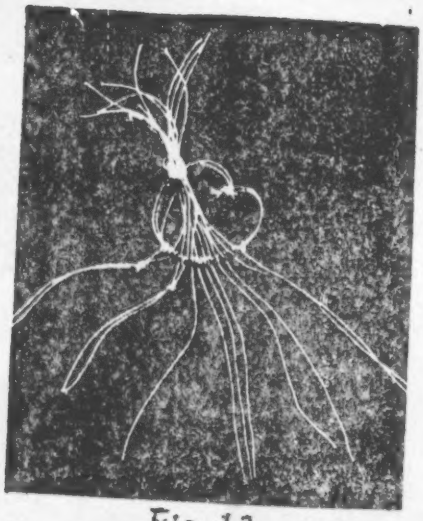


Fig 12

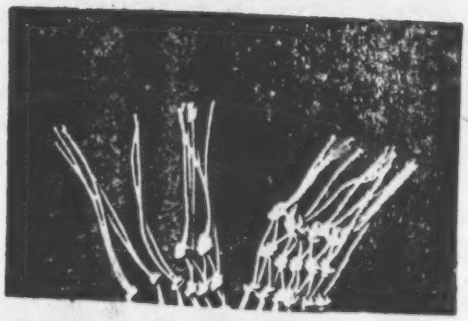


Fig. 13

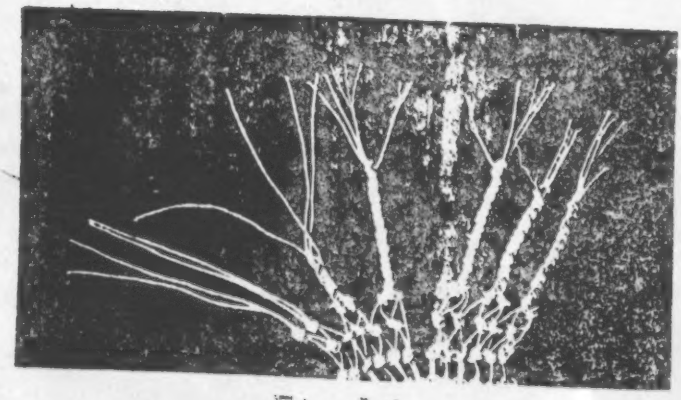


Fig. 14

Fig. 15

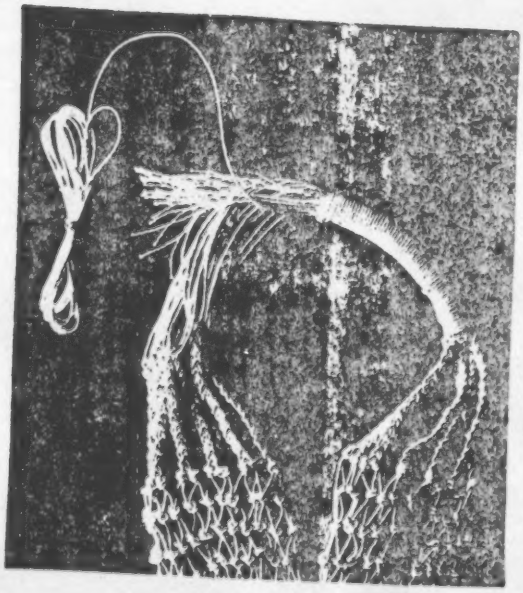


Fig. 16

Additional tips for giving instructions for the square knot:

Lay all 4 cords flat on the table. Explain: "You have 4 cords, one on the left, one on the right. These are called 'tying cords.' The two in the center are called 'holding cords.' First, with the left tying cord, make a half circle loop <u>over</u> the holding cords. Now place the right tying cord down <u>over</u> the first tying cord, and then <u>under</u> the two holding cords, and then up <u>through and over</u> the left circle loop. With both hands, using thumb and index fingers, pull both ends in opposite directions until tight." (It is a good idea to hold the holding cords firmly for the trainee until he learns how to tie this knot.) Repeat as he does the knot: "over...over... under...over." This repetition, with rhythm, seems to aid in learning this knot. Have trainee continue this exercise until he is acquainted with making the square knot.

k) To complete handle:
Cut a piece of string approximately 6 yards long. At one end of one of the handles, tie the 6-yard cord (in the middle of the cord). (Figure 17) Work square knots over the wrapped handle (using the handle itself for the two holding cords). Cover the length of the handle with square knots and tie off in the following manner:
After the last knot, separate the braids and tie the 2 cord ends between the braids so the finishing knot does not show. Tie several times for added strength and trim ends.

l) Repeat for other handle. This makes a beautifully-finished, strong handle. (Figure 18)

Average time for making string bag: 10 weeks.

(Note: This project takes more time than any of the others. One reason is because it is more tedious working with string but string is easier to manage when first learning. Also, by the time a trainee finishes it, he has become accustomed to the class routine and can usually work well with his hands.).

7- <u>EXERCISE FOR PLANT HANGER</u>

(Trainee already knows how to tie a half knot and a square knot, so this exercise is quite simple.)

a) Measure and cut 2 cords of string, each approximately 36" long. Mount with lark's head knots onto shorter string.
b) Practice the square knot for about 3".
c) Alternate tying and holding cords. (See P. 6)
d) Practice the "twist" (half knots tied on one side only). (See P. 9)

Average time for exercise: 2 or 3 days

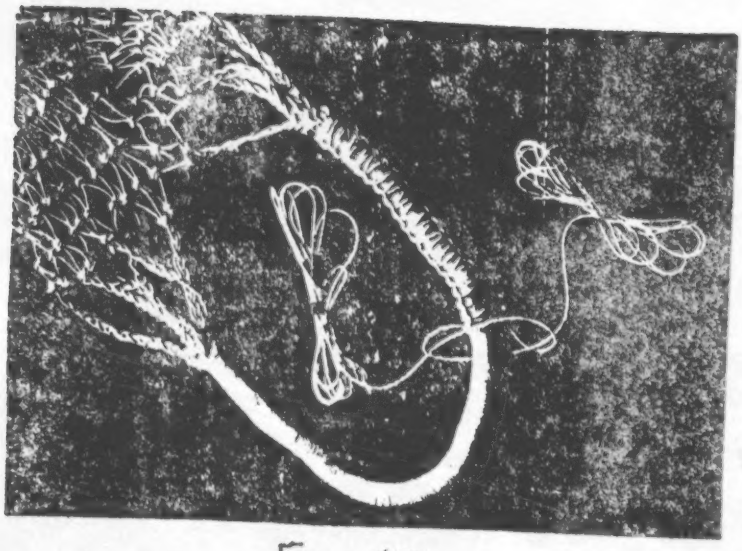


Fig. 17

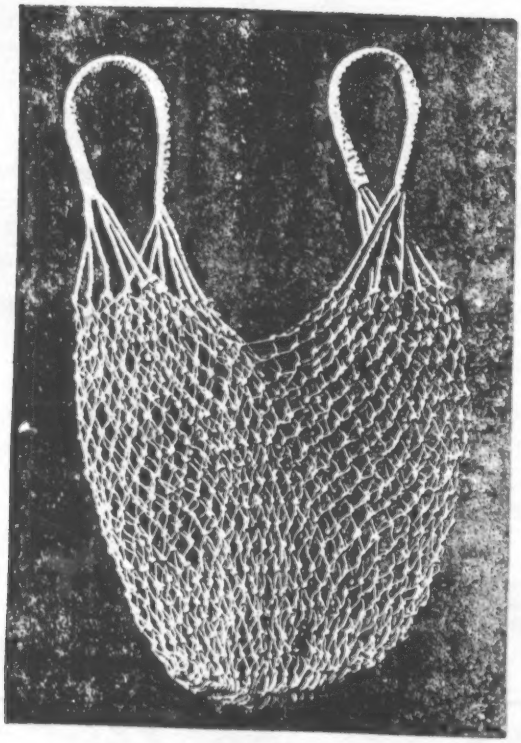


Fig. 18

8- **INSTRUCTIONS FOR PLANT HANGER**

Material: Jute

a) Measure and cut 6 cords, each six yards long.
b) Put the ends of the cords together, double them. There are now 12 cords for tying.
c) Cut another cord approximately 20" long.
d) Follow wrapping instructions for making loop. (See P. 7)
e) Divide the 12 cords into 3 groups of 4 each. Tie 2 groups in 2 loose knots and leave the 3rd group free for working. (Figure 19)
f) With the free group of 4 cords work about 7" or 8" of square knots.
g) In order to utilize cords equally, change tying cords and holding cords (See P. 6) and tie 13" of half knot twists. (Be sure to leave about 1 1/2 " spacing when changing tying & holding cords.)
h) Change tying and holding cords again (leaving 1 1/2" spacing) and tie 6" more of square knots. (You will have approximately 16" left on all four cords.)
i) Tie the other two groups (of 4 cords each) to correspond with this first group.
j) To finish: Leave approximately 5" of spacing on all three groups. Divide 2 adjacent cords from one group and tie a square knot with the adjacent 2 cords from the next group. (Figure 20)
k) Do this with the other two groups of cords (you will now have 3 square knots).
l) Now leave approximately 3" and repeat the process. (Figure 21)
m) Leave about 2" and put all cords together. Finish with a wrapping or tie all cords together in one big overhand knot.
n) Cut all remaining ends to the same length and fringe, if desired, by completely unraveling all ends. (Figure 22)

Average time: 1 week

9- **EXERCISE FOR PURSE** (Figure 23)

a) With string, cut 6 cords approximately 1 yard long. Mount on shorter string with lark's head knots. (You now have 12 cords for tying.)
b) Make 2 rows of double half hitches. (See P. 10) Tie 1st row left to right, 2nd row, right to left.
c) Make 3 rows alternating square knots. (See P. 9)
d) Make one row of double half hitches.
e) Make one pattern of "flowers" with double half hitches. (See P. 11)
f) Make 1 row double half hitches.
g) Make 3 rows of alternating square knots.
h) Make 1 row of double half hitches.
i) Make alternating rows of double half hitches, diagonally. (See P. 12)
j) Make 1 row of double half hitches.

(Continued)

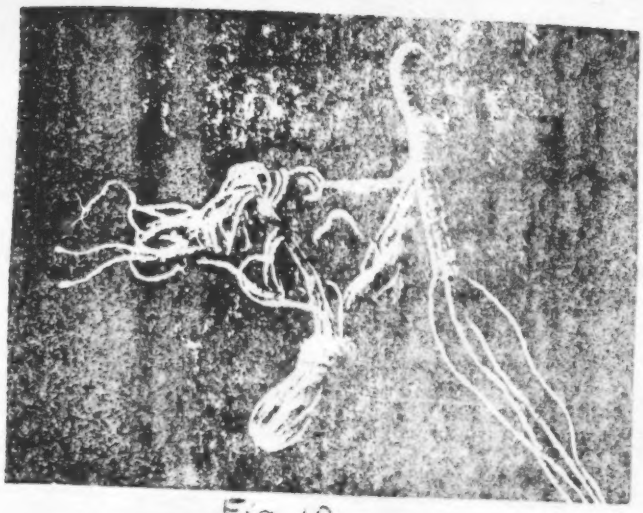


Fig 19

Fig 22

Fig 20

Fig 23

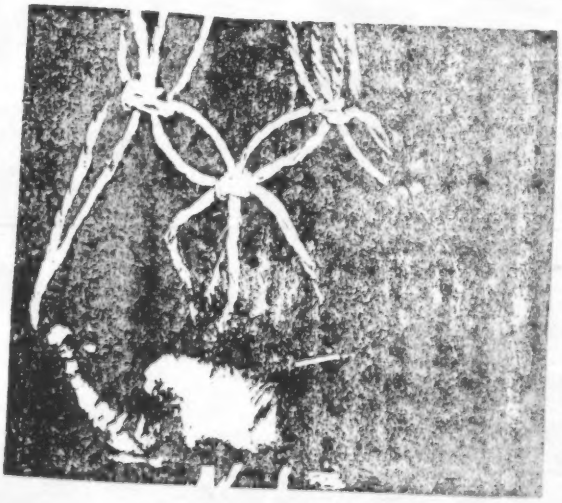


Fig 21

k) Make 3 rows of alternating square knots to form a triangle.
Row 1: tie 3 square knots.
Row 2: leave two cords, tie 2 square knots (2 cords left).
Row 3: leave 4 cords, tie 1 square knot (4 cords left).

l) Make diagonal double half hitches, beginning with 1st cord on left for holding cord, tie 5 double half hitches to center to point of a V. Then with 1st cord on right for holding cord, tie the other 5 cords to the left to point of a V. Tie both holding cords together. Finish by cutting all ends even. Fringe, if desired.

Average time: 2 weeks.

10- INSTRUCTIONS FOR PURSE (Figure 24)

Material: Jute

Cut 20 cords 170" long. Mount on another cord, approximately 14" long, with lark's head knots.
Work in alternating square knots for 46 rows.
47th row: Begin the curving for finishing: Tie 9 square knots.
48th row: Tie 8 square knots.
49th row: Tie 7 square knots.
50th row: Tie one row double half hitches (very close to the square knot curve).
Cut all cords even, leaving approximately 3 1/2" for fringe.

For handle and sides of purse:
Cut 4 cords 320" long (this is for a shoulder-length handle).
Mount these 4 cords on the left side of purse, in the 17th row from the beginning, with lark's head knots. (You will now have 8 cords for tying.)
Tie alternating square knots on the 8 cords, i.e.
1st row: Tie 2 square knots.
2nd row: Leave two cords, tie 1 square knot, leave two.
Repeat these two rows until it measures approximately 54".
Finishing: Sew the first 7 inches to the left side of the purse (two seams, front and back). Then sew the last 7" to the right side of the purse (two seams, front and back). This leaves 40" for the shoulder strap. If a shorter handle is desired, cut the cords shorter accordingly (approximately six times the desired finished length).

Note: This is a simple macramé bag for persons who have not completely mastered knots more complicated than the square knot. It is a good basic pattern and can be varied in design according to the trainee's capabilities. If he has mastered the exercise for purse very well, he can use more detailed patterns. Figure 25 shows another design using this basic pattern.

Average time: 2 to 3 weeks.

Fig. 24

Fig 25

11- INSTRUCTIONS FOR COVERING LAMP SHADE

Materials: Approximately 3 oz. of 4-ply yarn

1 lamp shade frame

First, roll yarn into a ball, no larger than one that will pass from the inside to the outside of the frame. Tie end of yarn to the top of frame.

Wind yarn from top to bottom of frame, inside and outside, keeping yarn fairly tight and close together (almost over-lapping at the top, which is smaller than the bottom of the frame). (Figure 26)

Continue until frame is completely covered. Finish by tying in a firm knot on the outside, close to either the top of bottom. If it is necessary to use more yarn than the original ball, add more yarn by tying in the same manner, on the outside, close to the top of bottom. This will be covered with a border and no knots will show.

Border:

For the top: Cut 6 strands of yarn 8 times the circumference of the top.
Cut a short strand of yarn, 5" or 6", tie ends together.
Mount the 6 cords with lark's head knots. (There are now 12 tying cords.)
Make "flowers" with diagonal double half hitches, using 6 cords on the left, 6 on the right.

Continue until you have enough border for the top.

(Note:
When tying with wool, tie the knots more loosely than with string or jute.)

For the bottom border:

Repeat as for top, using same proportions (8 x circumference).

Sew border to top and bottom with the same yarn. (Figure 27)

Average time: 1 to 2 weeks.

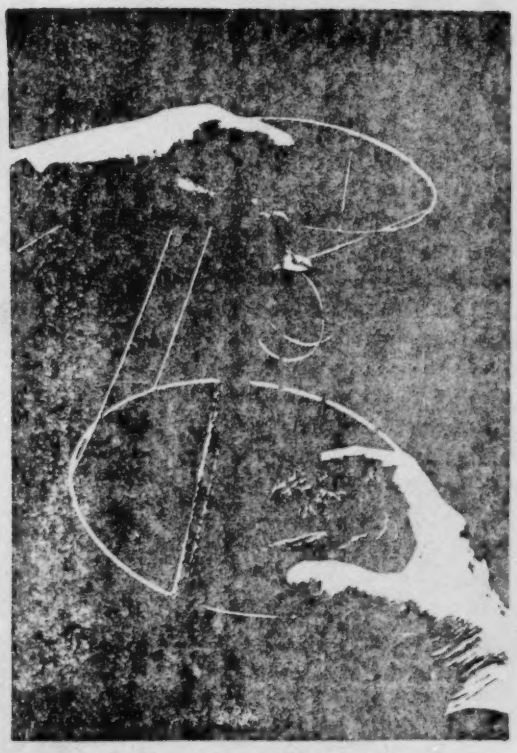


Fig. 26

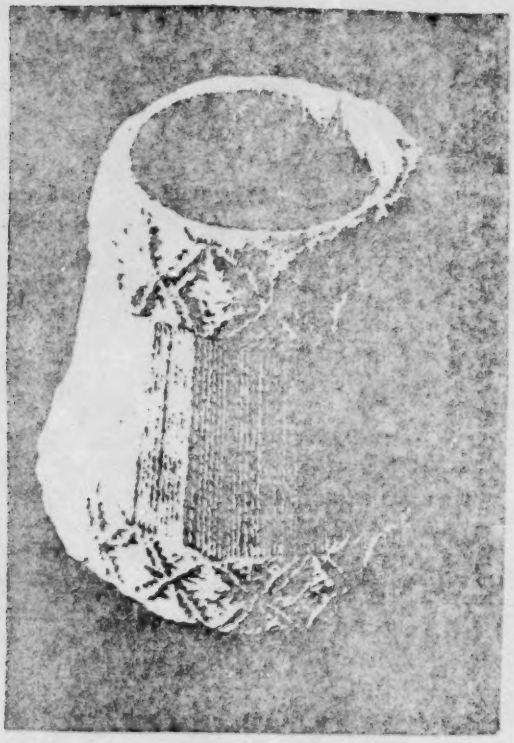


Fig. 27

12- OTHER MACRAME KNOTS

For the final project in this center, we have the trainees make a place mat of the same colored yarn as the lamp shade. However, the pattern used takes a frame which the trainees have made as part of the projects in manual training. Since it may be difficult for others to duplicate, it is being omitted in these instructions. Instead, other suggestions might include:

Another type of plant hanger. (Figures 28 and 29)
A calendar. (Figure 30)
An evening bag in finer material. (Figure 31)
A purse in yarn. (Figure 32)
A picture frame. (Figure 33)
A belt. (Figure 34)

Note: There are many other simple things that could be made. These are shown because they can be copied from the photos with the knots already learned. The trainees themselves, if encouraged, can come up with some unusual, original ideas.

13- OTHER IDEAS FOR PERSONS WHO CANNOT TIE KNOTS

Pencil holders for desk. (Figure 35)

Begin at the top. Wrap jute (or other material) around a tin can that has first had white glue applied (small areas at a time). Wrap tightly and closely. Finish at the bottom by tucking end of cord under the last row. Decorate with felt flowers or other designs (they might have to have help with cutting these) or dried flowers, weeds, seeds or whatever you have at hand.

Boxes made from popsickle sticks (or a reasonable facsimile). (Figure 36)

Stack the sticks in alternating layers after having applied glue to each bottom end of stick. Continue stacking until desired height. Make lid for box by gluing sticks close together. Decorate lid.

14- CLOSING REMARKS

Because you will find it necessary from time to time to make notes concerning changes, additions, or related information, the pages are being printed on one side only. It is a highly desirable practice to jot down an idea or bit of information the moment it is conceived at the place where it will be used.

The author hopes that this manual is merely a beginning collection of projects and ideas and will become a storehouse of information. In time, by trial and error, you will find what works best for YOUR blind friends.

GOOD LUCK!

Fig. 28

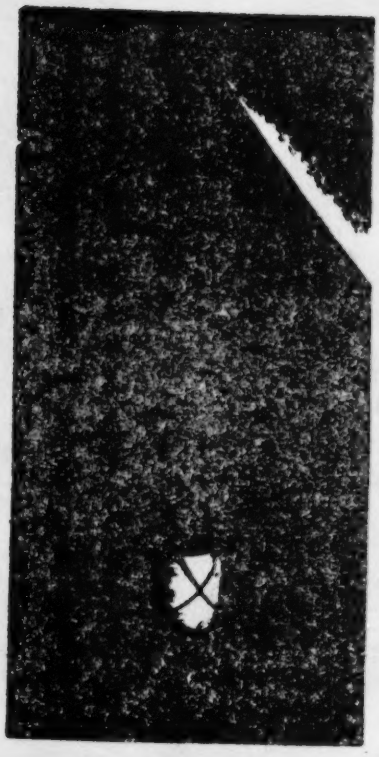


Fig. 29

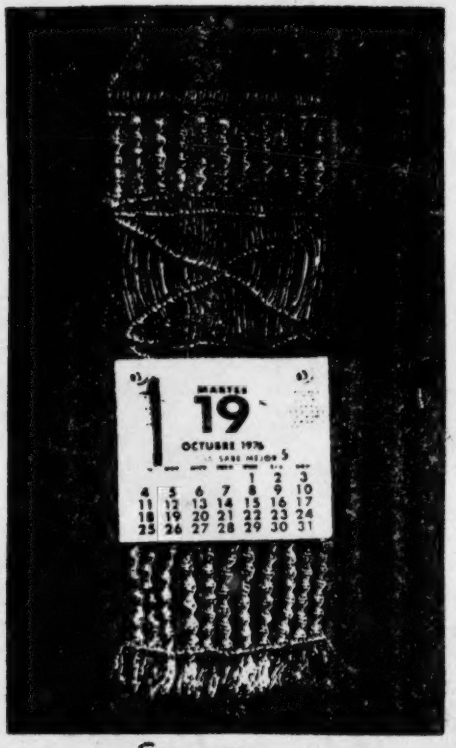


Fig. 30

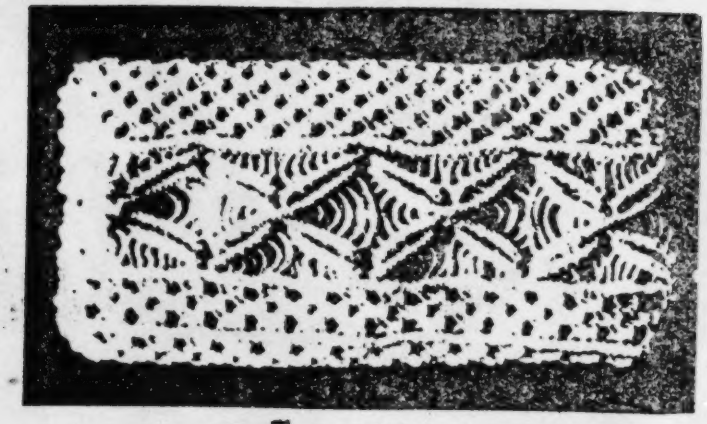


Fig. 31

Fig. 32.

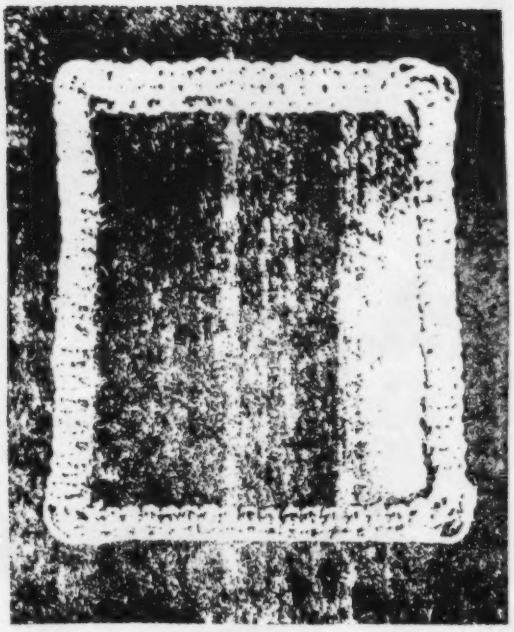


Fig. 33

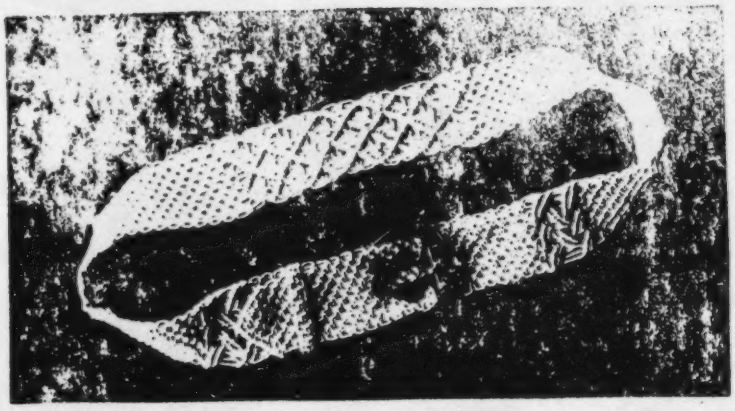


Fig. 34

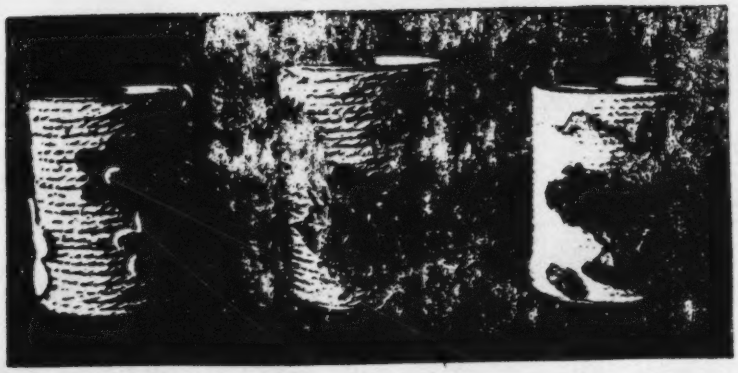


Fig. 35

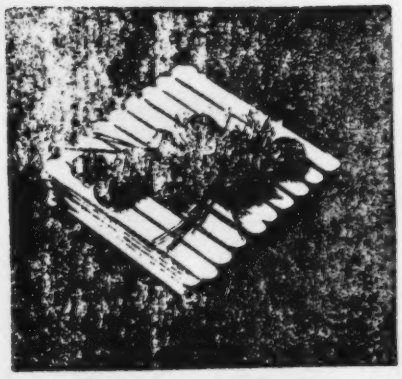


Fig. 36

GPO 917-897

Since 1961 when the Peace Corps was created, more than 80,000 U.S. citizens have served as Volunteers in developing countries, living and working among the people of the Third World as colleagues and co-workers. Today 6000 PCVs are involved in programs designed to help strengthen local capacity to address such fundamental concerns as food production, water supply, energy development, nutrition and health education and reforestation.

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